

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- 1 1. (Currently amended) A microphone comprising:
  - 2 a) a plurality of electrical contacts for interfacing with an external device;
  - 3 and
  - 4 b) a circuit, connected to at least one electrical contact, that provides the
  - 5 external device with data about the microphone~~that identifies at least one of~~
  - 6 ~~the following: the microphone manufacturer, the microphone manufacture~~
  - 7 ~~date, the microphone model number, the microphone serial number, the~~
  - 8 ~~microphone frequency response, whether the microphone uses phantom~~
  - 9 ~~power, the desired pre-amplifier gain, and the microphone dynamic response.~~
- 1 2. (Original) The microphone of claim 1 where the circuit forces the voltage
- 2 potential between the at least one electrical contact and another of the plurality of
- 3 electrical contacts to be zero.

1 3. (Original) The microphone of claim 1 where the circuit forces the voltage  
2 potential between the at least one electrical contact and a ground electrical contact  
3 to be zero.

1 4. (Original) The microphone of claim 1 where the circuit includes a resistor  
2 having a first and a second terminal, the first resistor terminal being connected to  
3 the at least one electrical contact, the second resistor terminal connected to  
4 another of the plurality of electrical contacts.

1 5. (Original) The microphone of claim 1 where the circuit includes a capacitor  
2 having a first and a second terminal, the first capacitor terminal being connected  
3 to the at least one electrical contact, the second capacitor terminal connected to  
4 another of the plurality of electrical contacts.

1 6. (Original) The microphone of claim 1 where the circuit includes an inductor  
2 having a first and a second terminal, the first inductor terminal being connected to  
3 the at least one electrical contact, the second inductor terminal connected to  
4 another of the plurality of electrical contacts.

1 7. (Original) The microphone of claim 1 where the circuit includes a  
2 programmable read only memory storing data that identifies at least one of the  
3 following: the microphone manufacturer, the microphone manufacture date, the

4 microphone model number, the microphone serial number, the microphone  
5 frequency response, whether the microphone uses phantom power, the desired  
6 pre-amplifier gain, and the microphone dynamic response.

1 8. (Original) The microphone of claim 1 where the circuit includes a serial  
2 programmable read only memory storing data that identifies at least one of the  
3 following: the microphone manufacturer, the microphone manufacture date, the  
4 microphone model number, the microphone serial number, the microphone  
5 frequency response, whether the microphone uses phantom power, the desired  
6 pre-amplifier gain, or the microphone dynamic response.

1 9. (Original) The microphone of claim 1 where the circuit includes a serial  
2 electrically erasable programmable read only memory storing data that identifies  
3 at least one of the following: the microphone manufacturer, the microphone  
4 manufacture date, the microphone model number, the microphone serial number,  
5 the microphone frequency response, whether the microphone uses phantom  
6 power, the desired pre-amplifier gain, or the microphone dynamic response.

1 10. (Currently amended) An interface unit comprising:  
2 a) a first connector having a plurality of electrical contacts for interfacing  
3 with a microphone; and

4       b) a second connector having a plurality of electrical contacts for interfacing  
5       with a computer system via a digital bus;  
6       wherein the interface unit is operable to obtain data from the microphone,  
7       ~~about the microphone, related to at least one of the following: the microphone~~  
8       ~~manufacturer, the microphone manufacture date, the microphone model~~  
9       ~~number, the microphone serial number, the microphone frequency response,~~  
10      ~~whether the microphone uses phantom power, the desired pre-amplifier gain,~~  
11      ~~and the microphone dynamic response; and~~  
12      wherein the interface unit is operable to transmit the data to the computer  
13      system.

1    11. (Original) The interface unit of claim 10 further comprising:

- 2       c) an amplifier for amplifying an analog signal received from the  
3       microphone;  
4       d) an analog-to-digital converter, coupled to the amplifier;  
5       e) a buffer, coupled to the analog-to-digital converter;  
6       f) a bus interface coupled to the buffer; and  
7       g) an I/O port for communicating with a computer system.

1    12. (Original) The interface unit of claim 11, wherein the analog-to-digital  
2    converter is also coupled to a microphone bias circuit.

1 13. (Original) The interface unit of claim 11, wherein the analog-to-digital  
2 converter is also coupled to a microphone bias circuit that contains a resistor  
3 having a first terminal and a second terminal, the first resistor terminal connected  
4 to at least one of the first connector's plurality of electrical contacts.

1 14. (Original) The interface unit of claim 11, wherein the first connector's  
2 plurality of electrical contacts includes a first electrical contact and a second  
3 electrical contact;  
4 wherein the bus interface is coupled to the first electrical contact, which contains a  
5 serial clock signal; and  
6 wherein the bus interface is coupled to the second electrical contact, which  
7 contains serial data signals.

1 15. (Original) The interface unit of claim 11, further comprising a switch that is  
2 configured to identify a physical parameter of a microphone.

1 16. (Original) The interface unit of claim 15, wherein the switch is coupled to the  
2 bus interface.

1 17. (Original) The bus interface of claim 10 further comprising a third connector  
2 for interfacing with a second microphone.

1 18. The interface unit of claim 10 further comprising a third connector for  
2 interfacing with another interface unit.

1 19. (Currently amended) A microphone comprising:

- 2 a) a connector having a plurality of electrical contacts for interfacing with a  
3 computer system via a digital bus; and  
4 b) wherein the microphone is operable to transmit data about the microphone  
5 to the computer system via the connector ~~related to at least one of the~~  
6 ~~following: the microphone manufacturer, the microphone manufacture date,~~  
7 ~~the microphone model number, the microphone serial number, the microphone~~  
8 ~~frequency response, whether the microphone uses phantom power, the desired~~  
9 ~~pre-amplifier gain, and the microphone dynamic response.~~

1 20. (Original) The microphone of claim 19 further comprising a programmable  
2 read only memory storing data that identifies at least one of the following: the  
3 microphone manufacturer, the microphone manufacture date, the microphone  
4 model number, the microphone serial number, the microphone frequency  
5 response, whether the microphone uses phantom power, the desired pre-amplifier  
6 gain, and the microphone dynamic response.

1 21. (Original) The microphone of claim 19 further comprising a serial  
2 programmable read only memory storing data that identifies at least one of the

3 following: the microphone manufacturer, the microphone manufacture date, the  
4 microphone model number, the microphone serial number, the microphone  
5 frequency response, whether the microphone uses phantom power, the desired  
6 pre-amplifier gain, or the microphone dynamic response.

1 22. (Original) The microphone of claim 19 further comprising a serial electrically  
2 erasable programmable read only memory storing data that identifies at least one  
3 of the following: the microphone manufacturer, the microphone manufacture date,  
4 the microphone model number, the microphone serial number, the microphone  
5 frequency response, whether the microphone uses phantom power, the desired  
6 pre-amplifier gain, or the microphone dynamic response.

1 23. (Currently amended) A method of transferring data to a computer system, the  
2 method comprising:

- 3 a) interfacing a microphone with an interface unit;  
4 b) interfacing the interface unit with a computer system; and  
5 c) transferring data about the microphone from the interface unit to the  
6 computer system, ~~the data related to at least one of the following: the~~  
7 ~~microphone manufacturer, the microphone manufacture date, the microphone~~  
8 ~~model number, the microphone serial number, the microphone frequency~~  
9 ~~response, whether the microphone uses phantom power, the desired pre-~~  
10 ~~amplifier gain, and the microphone dynamic response.~~

1 24. (Original) The method of claim 23, further comprising modifying at least one  
2 setting in the computer system based at least in part on the transferred data.

1 25. (Original) The method of claim 23, further comprising modifying at least one  
2 setting in the interface unit based at least in part on the transferred data.

1 26. (Currently amended) A method of transferring data to a computer system, the  
2 method comprising:

- 3 a) interfacing a microphone with a computer system; and  
4 b) transferring data about the microphone, from the microphone to the  
5 computer system, ~~the data related to at least one of the following: the~~  
6 ~~microphone manufacturer, the microphone manufacture date, the microphone~~  
7 ~~model number, the microphone serial number, the microphone frequency~~  
8 ~~response, whether the microphone uses phantom power, the desired pre-~~  
9 ~~amplifier gain, and the microphone dynamic response.~~

1 27. (Original) The method of claim 26, further comprising modifying at least one  
2 setting in the computer system based at least in part on the transferred data.

1 28. (Original) The method of claim 26, further comprising modifying at least one  
2 setting in the microphone based at least in part on the transferred data.



1 29. (New) The microphone of claim of 1, wherein the data about the microphone  
2 identifies at least one of the following: the microphone manufacturer, the  
3 microphone manufacture date, the microphone model number, the microphone  
4 serial number, the microphone frequency response, whether the microphone uses  
5 phantom power, the desired pre-amplifier gain, and the microphone dynamic  
6 response.

1 30. (New) The interface unit of claim of 10, wherein the data about the  
2 microphone is related to at least one of the following: the microphone  
3 manufacturer, the microphone manufacture date, the microphone model number,  
4 the microphone serial number, the microphone frequency response, whether the  
5 microphone uses phantom power, the desired pre-amplifier gain, and the  
6 microphone dynamic response.

1 31. (New) The microphone of claim 19, wherein the data transmitted is related to  
2 at least one of the following: the microphone manufacturer, the microphone  
3 manufacture date, the microphone model number, the microphone serial number,  
4 the microphone frequency response, whether the microphone uses phantom  
5 power, the desired pre-amplifier gain, and the microphone dynamic response.

1 32. (New) The method of claim 23, wherein the data about the microphone is  
2 related to at least one of the following: the microphone manufacturer, the

3 microphone manufacture date, the microphone model number, the microphone  
4 serial number, the microphone frequency response, whether the microphone uses  
5 phantom power, the desired pre-amplifier gain, and the microphone dynamic  
6 response.

1 33. (New) The method of claim 26, wherein the data about the microphone is  
2 related to at least one of the following: the microphone manufacturer, the  
3 microphone manufacture date, the microphone model number, the microphone  
4 serial number, the microphone frequency response, whether the microphone uses  
5 phantom power, the desired pre-amplifier gain, and the microphone dynamic  
6 response.